

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of determining the acoustical transfer impedance  $Z_t$  between a first position and a listening position of a human being, the method comprising

- generating an acoustical volume velocity  $Q$  in the listening position,
- measuring a response quantity  $p$  at the first position resulting from the volume velocity  $Q$ , and
- determining the acoustical transfer impedance  $Z_t$  as the response quantity  $p$  divided by the acoustical volume velocity  $Q$ ,  $Z_t = p/Q$ ,

~~characterized in that~~ wherein

the acoustical volume velocity  $Q$  is generated using a simulator~~(10)~~ simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear~~(14, 15)~~ with an orifice in the simulated head and a sound source~~(30)~~ in the simulator~~(10)~~ for outputting the acoustical volume velocity  $Q$  through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

2. (Currently Amended) A method according to claim 1, wherein the simulator simulates the head~~(13)~~ and a torso~~(11)~~ of a human being.

3. (Currently Amended) A method according to claim 1, wherein the simulator comprises a sound source~~(30)~~ in the interior of the simulator and a pair of microphones~~(M1, M2, M3, M4)~~ arranged to measure a pair of sound pressures in a canal~~(18)~~ leading from the sound source to the orifice, and that the method further comprises determining the volume velocity  $Q$  based on the pair of sound pressures.

4. (Currently Amended) A method according to claim 1, wherein the response quantity is sound pressure.
5. (Currently Amended) A method according to claim 1, wherein measuring the response quantity comprises at least one of measuring a sound pressure by at least one microphone and measuring structural vibrations by at least one vibration sensor.
6. (Currently Amended) A simulator~~(10)~~ for use with the method according to claim 1 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear~~(14, 15)~~ with an orifice in the simulated head and a sound source~~(30)~~ in the simulator~~(10)~~ for outputting the acoustical volume velocity Q through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.
7. (Currently Amended) A simulator~~(10)~~ according to claim 6, wherein the simulator simulates the head~~(13)~~ and a torso~~(11)~~ of a human being.
8. (Currently Amended) A simulator~~(10)~~ according to any claim 6, wherein the simulator comprises two orifices simulating a left ear~~(14)~~ and right ear~~(15)~~ respectively of the simulated human being.
9. (Currently Amended) A simulator according to claim 8, wherein means~~(19)~~ are provided for selectively outputting sound signals through the simulated left ear~~(14)~~ or through the simulated right ear~~(15)~~.
10. (Currently Amended) A simulator according to claim 6, wherein the simulator comprises means ~~(M1, M2; M3, M4)~~ for measuring the sound output from the simulated ears~~(14, 15)~~.
11. (Currently Amended) A simulator according to claim 10, wherein the means for measuring the sound output from the simulated ears~~(14, 15)~~ comprises a pair of microphones~~(M1, M2; M3, M4)~~ for measuring the output sound volume velocity.

12. (Currently Amended) A simulator-(10) for use with the method according to claim 2 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear-(14,15) with an orifice in the simulated head and a sound source-(30) in the simulator-(10) for outputting the acoustical volume velocity  $Q$  through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

13. (Currently Amended) A simulator-(10) for use with the method according to claim 3 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear-(14,15) with an orifice in the simulated head and a sound source-(30) in the simulator-(10) for outputting the acoustical volume velocity  $Q$  through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

14. (Currently Amended) A simulator-(10) for use with the method according to claim 4 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear-(14,15) with an orifice in the simulated head and a sound source-(30) in the simulator-(10) for outputting the acoustical volume velocity  $Q$  through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

15. (Currently Amended) A simulator-(10) for use with the method according to claim 5 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear-(14,15) with an orifice in the simulated head and a sound source-(30) in the simulator-(10) for outputting the acoustical volume velocity  $Q$  through the orifice.